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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,474

12/28/2004

Mami Nonomura

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7590

04/21/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

WHITE, EVERETT NMN

ART UNIT

PAPER NUMBER

1623

NOTIFICATION DATE

DELIVERY MODE

04/21/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,474	<b>Applicant(s)</b> NONOMURA ET AL.	
	<b>Examiner</b> EVERETT WHITE	<b>Art Unit</b> 1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The amendment filed January 15, 2008 has been received, entered and carefully considered. The amendment affects the instant application accordingly:
  - (A) Claims 10 and 11 have been canceled;
  - (B) New Claims 12 to 21 have been added;
  - (C) Claims 1 and 3-9 have been amended;
  - (D) Comments regarding Office Action have been provided drawn to:
    - (I) 112, 2<sup>nd</sup> paragraph rejection and 101 rejection, which have been withdrawn;
    - (II) 102(b) rejection, which has been maintained for the reasons of record;
2. Claims 1-9 and 12-21 are pending in the case.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6, 9, 12-14 and 18-21 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nagasawa et al (WO 00/73351 A1).
5. Applicant's arguments filed January 15, 2008 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that the Nagasawa et al reference does not describe selecting a cellulose ether as a backbone for polysaccharide derivatives, wherein the cellulose ether has an average molecular weight of 100,000 to 600,000. The argument is not persuasive since the Nagasawa et al references clearly establish that the polysaccharide thereof may be selected as cellulose ether which has an average molecular weight within the instantly claimed range. For example, see the English Language equivalent, US Pat. 6,541,614, in column 5, line 13, which discloses hydroxyethylcellulose as being particularly preferred. Also, see column 5, lines 22-25 of US Pat. 6,541,614, wherein weight average molecular weight of the polysaccharide or its derivatives is more preferably from

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100,000 to 5,000,000, which clearly cover the average molecular weight range recited in the instant claims. Applicants also argue that the Nagasawa et al reference does not describe the claimed cellulose ether in combination with “n” of formula (I) being from 10-20. This argument is not persuasive since the Nagasawa et al references discloses a formula (I) having substantially identical components as claimed including the “n” symbol, which ranges from 8 to 300, which cover the instantly claimed range of “n” representing a number between 10-20 (see column 1, last paragraph of English Language equivalent US Pat. 6,541,614). Applicants further argue that the Nagasawa et al reference does not teach a polysaccharide agent being a cosmetic product. See column 1, 3<sup>rd</sup> paragraph of the Nagasawa et al’s English Language equivalent US Pat. 6,541,614, wherein the text discloses cellulose ethers as being one of the important ingredients of cosmetic preparations. Applicants finally argue that the allergen inactivating effect of the polysaccharide derivative of the instant claims as being different from the thickening effect of the polysaccharide derivatives of the Nagasawa et al references. However, this argument is not persuasive since it is well known in the art for cosmetic products and/or cleaning agents to have allergen inactivating properties. This argument is also not persuasive since the polysaccharide derivatives specified in the instant claims are identical to the polysaccharide derivatives disclosed in the Nagasawa et al references. Applicants are reminded that products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada* 15 USPQ 2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01

Accordingly, the rejection of Claims 1-6, 9, 12-14 and 18-21 under 35 U.S.C. 102(b) as being anticipated by the Nagasawa et al reference is maintained for the reasons of record.

***Claim Rejections - 35 USC § 103***

***New Ground of Rejection***

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

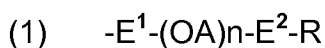
7. Claims 1- 9, 12-14 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasawa et al (WO 00/73351 A1, already of record) in view of Golz-Berner et al (US Patent No. 6,245,342, newly cited).

Applicants claim an allergen inactivating agent comprising a polysaccharide derivative as its effective component, wherein said polysaccharide derivative has a cellulose ether as its backbone, and some or all of hydrogen atoms in the hydroxy group of the polysaccharide derivative are substituted by a group represented by the following general formula (I):



wherein  $E^1$  represents an alkylene containing 1 to 6 carbon atoms optionally substituted with hydroxy group or oxo group;  $n$  represents a number of 0 to 50;  $A$  independently represents an alkylene containing 1 to 6 carbon atoms, the number of  $A$  being  $n$ ;  $E^2$  represents ether bond or oxycarbonyl group;  $R$  represents an alkyl group containing 4 to 30 carbon atoms optionally substituted with hydroxy group, a sulfoalkyl group containing 1 to 5 carbon atoms optionally substituted with hydroxy group, or a salt thereof, wherein the cellulose ether has an average molecular weight of 100,000 to 600,000. Applicants further claim that the allergen inactivating agent is contained in a mask.

The Nagasawa et al WO publication discloses a polysaccharide derivative having a structure formed by replacing part or all of the hydrogen atoms of the hydroxyl groups in a polysaccharide or a derivative thereof with a group represented by the formula



wherein  $E^1$  represents  $C_{1-6}$  divalent saturated hydrocarbon group optionally substituted by hydroxy or oxo;  $n$  is a number of 8 to 300;  $nA$ 's are the same or different and each represents a  $C_{1-6}$  divalent saturated hydrocarbon group;  $E^2$  represents an ether bond or oxycarbonyl; and  $R$  represents  $C_{4-30}$  alkyl optionally substituted by hydroxyl (see Abstract). The specification of the Nagasawa et al publication discloses hydroxyethyl cellulose as an example of the polysaccharide derivative (see page 5 of the machine translated document), which embraces instant Claim 3. The different sources of the allergen as recited in instant Claim 2 are noted, but have not been given patentable weight since the allergen inactivating agent, per se, recited therein does not change. The presence of the polysaccharide derivative inherently treats allergen in the various toiletries cited in the Nagasawa et al publication since products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada* 15 USPQ 2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01. See page 6, 2<sup>nd</sup> paragraph of the machine translated document of the Nagasawa et al publication wherein weight average molecular weight of the polysaccharides thereof ranges from

10,000 to 5 million, which covers the molecular weight range recited in instant Claims 1 and 13.

The instantly claimed allergen inactivating agent comprising a polysaccharide derivative selected as cellulose ether as its effective component of the instant claims differs from the polysaccharide derivative of the Nagasawa et al publication by claiming that the allergen inactivating agent is contained in a mask.

The Golz-Berner et al patent shows that the present of hydroxyethylcellulose, a cellulose ether, in a mask is known in the art. See column 3, lines 13-15 of the Golz-Berner et al patent wherein hydroxyethylcellulose is disclosed as a conventional additive or vehicle for use in substances such as cosmetics and hair mask products.

One of ordinary skill in this art would be motivated to combine the teaching of the Nagasawa et al publication with the teaching of the Golz-Berner et al patent since both references disclose hydroxyethyl cellulose as a component of cosmetic products.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the hydroxyethylcellulose of the Nagasawa et al publication with another hydroxyethyl cellulose in view of the recognition in the art, as evidenced by the Golz-Berner et al patent, that the hydroxyethylcellulose is a conventional additive or vehicle for use with cosmetic and hair mask products.

8. Applicant's arguments with respect to Claims 1- 9, 12-14 and 16-21 have been considered but are moot in view of the new ground(s) of rejection.

#### ***New Ground of Rejection***

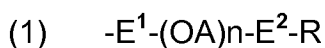
9. Claims 1-8, 9, 12-15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasawa et al (WO 00/73351 A1, already of record) in view of Palinczar (US Patent No.4,671,955, newly cited).

Applicants claim an allergen inactivating agent comprising a polysaccharide derivative as its effective component, wherein said polysaccharide derivative has a cellulose ether as its backbone, and some or all of hydrogen atoms in the hydroxy group of the polysaccharide derivative are substituted by a group represented by the following general formula (I):



wherein  $E^1$  represents an alkylene containing 1 to 6 carbon atoms optionally substituted with hydroxy group or oxo group;  $n$  represents a number of 0 to 50;  $A$  independently represents an alkylene containing 1 to 6 carbon atoms, the number of  $A$  being  $n$ ;  $E^2$  represents ether bond or oxycarbonyl group;  $R$  represents an alkyl group containing 4 to 30 carbon atoms optionally substituted with hydroxy group, a sulfoalkyl group containing 1 to 5 carbon atoms optionally substituted with hydroxy group, or a salt thereof, wherein the cellulose ether has an average molecular weight of 100,000 to 600,000. Applicants further claim that the allergen inactivating agent is an aerosol.

The Nagasawa et al WO publication discloses a polysaccharide derivative having a structure formed by replacing part or all of the hydrogen atoms of the hydroxyl groups in a polysaccharide or a derivative thereof with a group represented by the formula



wherein  $E^1$  represents  $C_{1-6}$  divalent saturated hydrocarbon group optionally substituted by hydroxy or oxo;  $n$  is a number of 8 to 300;  $nA$ 's are the same or different and each represents a  $C_{1-6}$  divalent saturated hydrocarbon group;  $E^2$  represents an ether bond or oxycarbonyl; and  $R$  represents  $C_{4-30}$  alkyl optionally substituted by hydroxyl (see Abstract). The specification of the Nagasawa et al publication discloses hydroxyethyl cellulose as an example of the polysaccharide derivative (see page 5 of the machine translated document), which embraces instant Claim 3. The different sources of the allergen as recited in instant Claim 2 are noted, but have not been given patentable weight since the allergen inactivating agent, per se, recited therein does not change. The present of the polysaccharide derivative inherently treats allergen in the various toiletry cited in the Nagasawa et al publication since products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada* 15 USPQ 2d 1655, 1658 (Fed. Cir. 1990). See MPEP 2112.01. See page 6, 2<sup>nd</sup> paragraph of the machine translated document of the Nagasawa et al publication wherein weight average molecular weight of the polysaccharides thereof ranges from



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10,000 to 5 million, which covers the molecular weight range recited in instant Claims 1 and 13.

The instantly claimed allergen inactivating agent comprising a polysaccharide derivative selected as cellulose ether as its effective component of the instant claims differs from the polysaccharide derivative of the Nagasawa et al publication by claiming that the allergen inactivating agent is an aerosol.

The Palinczar patent shows that the present of a hydroxyethylcellulose, a cellulose ether, in an aerosol is known in the art. See column 3, lines 6-10 of the Palinczar patent wherein hydroxyethylcellulose is disclosed as a component of a sunscreen composition in a form that may be selected as an aerosols which provide ultraviolet light protection to the skin.

One of ordinary skill in this art would be motivated to combine the teaching of the Nagasawa et al publication with the teaching of the Palinczar patent since both references discloses hydroxyethyl cellulose as a component of cosmetic products.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the hydroxyethylcellulose of the Nagasawa et al publication with another hydroxyethyl cellulose in view of the recognition in the art, as evidenced by the Palinczar patent, that the hydroxyethylcellulose increases the aesthetic water-proof property of sunscreen compositions.

10. Applicant's arguments with respect to Claims 1-8, 9, 12-15 and 18-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Summary***

11. All the pending claims (Claims 1-9 and 12-21) are rejected.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Examiner's Telephone Number, Fax Number, and Other Information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Everett White/  
Examiner  
Art Unit 1623

/Shaojia Anna Jiang, Ph.D./  
Supervisory Patent Examiner, Art Unit 1623